WHAT IS CLAIMED:

1. A roll comprising:

a roll jacket structured and arranged to surround an interior space; and

an absorber arrangement comprising at least one passive vibration absorber located within the interior space.

2. The roll in accordance with claim 1 in combination with a calender roll stack, said calender roll stack comprising at least two end rolls and at least one middle roll comprising said roll.

3. The roll in accordance with claim 1, wherein said vibration absorber is arranged to act on said roll jacket.

4. The roll in accordance with claim 3, wherein said vibration absorber is structured and arranged to act on said roll jacket in a damping manner.

5. The roll in accordance with claim 1, wherein said vibration absorber comprises a mass that is at least 15% of a mass of said roll jacket.

6. The roll in accordance with claim 5, wherein said mass is at least 20% of the mass of said roll jacket

7. The roll in accordance with claim 1, wherein said vibration absorber is positioned, in an axial direction of the roll jacket, at a location at which a vibration loop forms during operation.

8. The roll in accordance with claim 7, wherein said vibration absorber comprises a plurality of individual absorbers that are positioned, distributed in the axial direction, at locations at which vibration loops form during operation.

9. The roll in accordance with claim 8, wherein an individual absorber is arranged at each vibration loop.

10. The roll in accordance with claim 1, wherein said vibration absorber has an absorber frequency that lies below a natural frequency of said roll.

11. The roll in accordance with claim 10, wherein the natural frequency is decisive of the formation of barring.

12. The roll in accordance with claim 1, wherein said vibration absorber has an absorber frequency that lies below a natural frequency of a roll system comprising said roll.

13. The roll in accordance with claim 12, wherein the natural frequency is decisive of the formation of barring.

14. The roll in accordance with claim 10, wherein the absorber frequency is coordinated with a barring frequency.

15. The roll in accordance with claim 1, wherein said vibration absorber comprises a roll-shaped body.

16. The roll in accordance with claim 15, wherein said roll-shaped body is structured and arranged to slide into said roll.

17. The roll in accordance with claim 1, further comprising a spring arrangement structured and arranged to support said vibration absorber in said roll jacket.

18. The roll in accordance with claim 17, wherein said spring arrangement comprises a plurality of cup springs.

19. The roll in accordance with claim 1, further comprising a damper arrangement positioned between said vibration absorber and said roll jacket.

20. The roll in accordance with claim 19, further comprising a spring arrangement combined with said damper arrangement to support said vibration absorber in said roll jacket.

21. The roll in accordance with claim 20, further comprising at least one support composed of an elastomer material, wherein said vibration absorber is supported on said roll jacket via said at least one support.

22. The roll in accordance with claim 1, wherein said vibration absorber is structured and arranged to be moveable relative to said roll jacket.

23. The roll in accordance with claim 22, wherein said vibration absorber is structured to be rotatably movable relative to said roll jacket.

24. The roll in accordance with claim 23, wherein said vibration absorber is structured to be limitedly rotatably movable relative to said roll jacket.

25. The roll in accordance with claim 1, further comprising a liquid arranged to fill, at least in an area between said vibration absorber and said roll jacket, said interior space.

26. The roll in accordance with claim 25, wherein said liquid has a viscosity that exceeds a predetermined minimum.

27. The roll in accordance with claim 1, wherein said vibration absorber comprises a surrounding intermediate layer composed of a viscoelastic material.

28. The roll in accordance with claim 27, wherein said surrounding intermediate layer is shrunk in said roll jacket.

29. The roll in accordance with claim 27, further comprising a pipe arranged between said roll jacket and said intermediate layer.

30. The roll in accordance with claim 1, wherein said vibration absorber comprises a mass element supported in at least one disk composed of an elastic material, and wherein said disk is supported on said roll jacket.

31. The roll in accordance with claim 30, wherein said disk rests on said roll jacket over its entire circumference.

32. The roll in accordance with claim 30, wherein said mass element projects beyond said disk in an axial direction of said roll

33. The roll in accordance with claim 30, wherein said mass element comprises an enlargement outside of said disk.

34. The roll in accordance with claim 1, wherein said vibration absorber has an adjustable absorber frequency.

35. The roll in accordance with claim 34, wherein said absorber frequency is adjustable from outside of said roll.

36. The roll in accordance with claim 34, wherein said vibration absorber comprises a spring unit having a rigidity that can be changed in a controlled manner.

37. The roll in accordance with claim 1, wherein said absorber arrangement comprises vibration absorbers having different absorber frequencies.

38. A calender with a roll stack having at least two middle rolls, at least one of said at least two middle rolls being said roll in accordance with claim 1.

39. A calender comprising:

a roll stack having at least two middle rolls;

at least one of said at least two middle rolls comprises a roll jacket arranged to define and surround an interior space; and

an absorber arrangement comprising at least one passive vibration absorber located in the interior space.

40. A process of damping vibrations in the calender in accordance with claim 39, comprising:

guiding a paper web through the calender and operating the calender, whereby vibrations arise in the calender, which include a plurality of frequencies; and

damping the vibrations in the at least one middle roll via the absorber arrangement located in the interior space.

41. The process in accordance with claim 40, wherein the vibrations arise due to at least one of non-homogeneities, anisotropies or geometric distortions in the calender and paper thickness fluctuations or basis weight fluctuations in the web.

42. The process in accordance with claim 40, wherein, prior to operation of the calender, the process further comprises:

determining, by at least one of calculation and measurement, a contact natural frequency of the at least one middle roll; and

adjusting an absorber frequency in accordance with the determined contact natural frequency.

43. The process in accordance with claim 42, wherein in accordance with the contact natural frequency of the at least one middle roll, at least one

vibration loop forms during the operation of the calender, and the process further comprises:

positioning the at least one passive vibration absorber at a location at which the at least one vibration loop forms.

44. The process in accordance with claim 42, wherein in accordance with the contact natural frequency of the at least one middle roll, a plurality of vibration loops form during the operation of the calender and the at least one passive vibration absorber comprises a plurality of vibration absorbers, and the process further comprises:

positioning a vibration absorber at locations at which the plurality of vibration loops form.

45. The process in accordance with claim 44, further comprising positioning a vibration absorber at each location at which the plurality of vibration loops form.

46. The process in accordance with claim 40, further comprising adjusting an absorber frequency of the at least one passive vibration absorber by a remote controlled change of a spring rigidity.